

# Health of King County 2006

## *Chapter 10: Mental Health/Drug Abuse*

### Frequent Mental Distress

### Suicide

### Hospitalizations for Psychoses and Depression

### Alcohol Induced Deaths

### Drug Induced Deaths



# Mental Health/Drug Abuse

**A mental illness (or mental disorder) is a health condition that is "characterized by alterations in thinking, mood, or behavior...associated with distress and/or impaired functioning."<sup>1</sup> Mental illness is the second leading cause of disability and premature mortality, and accounts for over 15% of the burden of all diseases in the U.S.<sup>2</sup> Mental health is intricately related to physical health; the mind mediates responses to the physical and social environment that affect physical health, and somatic diseases may directly or indirectly have an impact on mental functioning. Health problems associated with substance abuse include psychosis, depression, drug overdose, skin and lung infections, HIV/AIDS motor vehicle crashes and other unintentional injuries, homicide and other injuries caused by violence. Local population-based data on mental illness and substance abuse is far from comprehensive; this section of Health of King County presents some of the available data on the county and its neighborhoods.**

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## References

<sup>1</sup> U.S. Department of Health and Human Services. *Mental Health: A Report of the Surgeon General - Executive Summary*. Rockville, MD: U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration, Center for Mental Health Services, National Institutes of Health, National Institute of Mental Health, 1999.

<sup>2</sup> Murray CL and Lopoex AD (Eds.) (1996): *The global burden of disease. A comprehensive assessment of mortality and disability from diseases, injuries, and risk factors in 1990 and projected to 2020*. Cambridge MA: Harvard University. As quoted in Mental Health: A Report of the Surgeon General cited above.

# Self-Reported Frequent Mental Distress

Frequent mental distress (FMD) is a factor contributing to poor mental health. The measure FMD was developed by the Centers for Disease Control and Prevention<sup>3</sup> from a question on the Behavioral Risk Factor Surveillance Survey: “Now, thinking about your mental health, which includes stress, depression, and problems with emotions, for how many days during the past 30 days was your mental health not good?” A survey respondent who reported 14 or more of poor mental health days was classified as having FMD.

9.3% of King County residents (130,000 people) suffered from FMD in 2004.

King County was ranked 8<sup>th</sup> of 15 major metropolitan counties in FMD and was slightly above demographically similar counties.

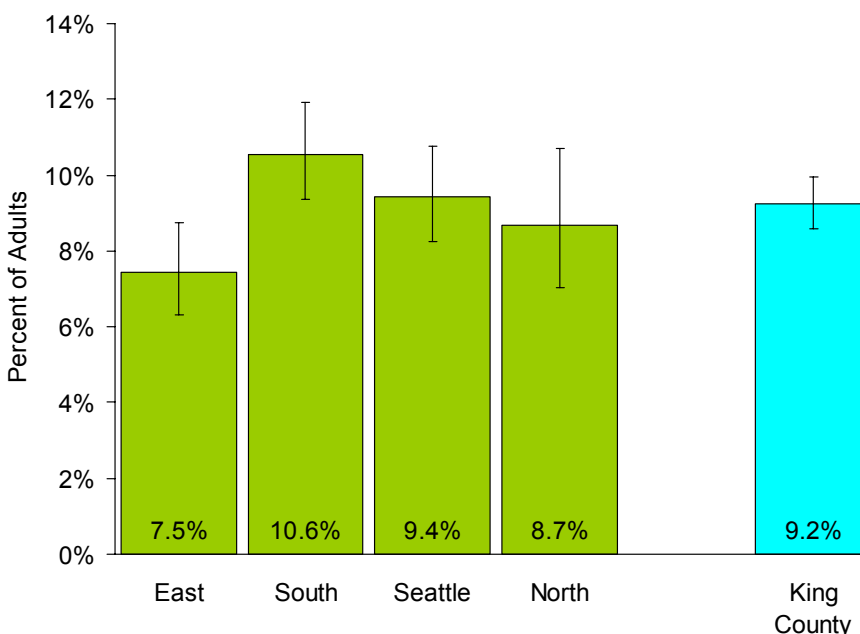
Higher rates were seen in South Region; lower rates were seen in older adults.

FMD was more prevalent in those with lower household incomes, in African Americans and Hispanic/Latinos, and in those whose sexual orientation was gay/lesbian/bisexual.

## King County and Regions

- In 2004, 9.3% of King County adults 18 and older (or about 130,000 people) reported FMD in the previous month.
- Averaging 2000 to 2004 data, the highest percent of FMD was in South Region (10.6%), which was significantly greater compared to East Region (7.5%). Seattle (9.4%) and North Region (8.7%) had intermediate values. (For comparison, this 5-year average was 9.2% for King County as a whole.)
- FMD held steady in King County and its communities in the last 10 years of data (1995 to 2004).
- King County’s rate was slightly less than that for Washington State (9.9%) and was also slightly below the median for the 15 largest counties in the U.S. (Brooklyn, NY, 10.2%).

**Frequent Mental Distress by Region, Age 18 and Older, King County, 2000-2004 Average**



Data Source: BRFSS

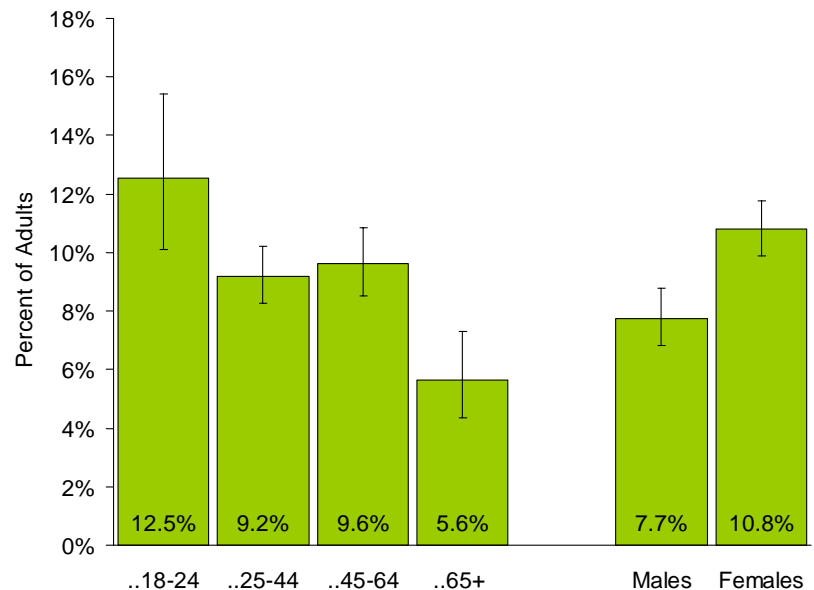
Produced by: Epidemiology, Planning & Evaluation, Public Health - Seattle & King County

The local rate was slightly more than the FMD rate for demographically similar counties (8.2%) (see [Public Health Core Indicators for Seattle & King County](#), for additional detail on trends and comparisons).

## Age and Gender

- On average, FMD becomes less prevalent as people get older. 12.5% of 18-to-24 year-old respondents reported FMD, while, among those 65 and older, only 5.6% had FMD.
- Women (10.8%) were also more likely to report FMD than men (7.7%).

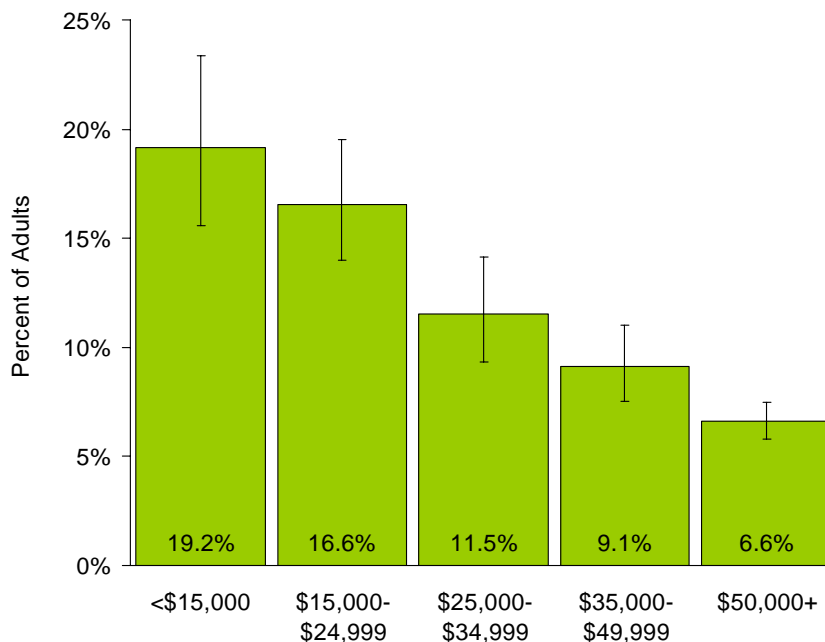
**Frequent Mental Distress by Age, Gender, Age 18 and Older, King County, 2000-2004 Average**



Data Source: BRFSS

Produced by: Epidemiology, Planning & Evaluation, Public Health - Seattle & King County

**Frequent Mental Distress by Annual Household Income, Age 18 and Older, King County, 2000 to 2004 Average**



Data Source: BRFSS

Prepared by: Epidemiology, Planning and Evaluation Unit, PHSKC

## Focus on Disparities

The burden of FMD falls disproportionately on low-income people and people of color and those who identify as gay/lesbian/bisexual.

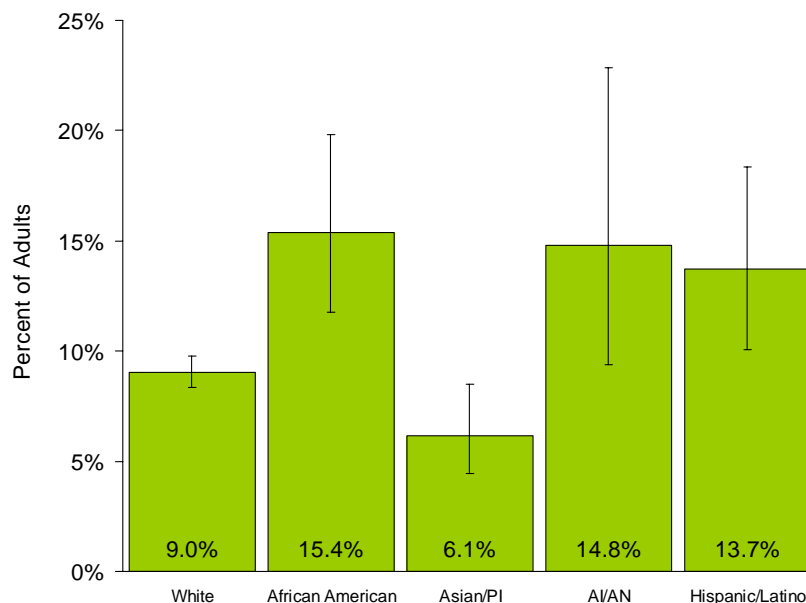
### Annual Household Income

- FMD was much more common in low-income respondents. Almost one in five (19.2%) of those with household incomes below \$15,000 per year experienced FMD. In this group, FMD was almost three times higher than the rate in people in households earning \$50,000 or more per year.

## Race/Ethnicity

- African Americans (15.4%), American Indian/Alaska Natives (14.8%) and Hispanic/Latinos (13.7%) all had significantly greater FMD rates than seen in white (9.0%) and Asian/Pacific Islander (6.1%) respondents. A limitation of the data source, the BRFSS, is that data are not collected by specific Asian background. From other projects, it is known that Asian groups differ in mental health status.

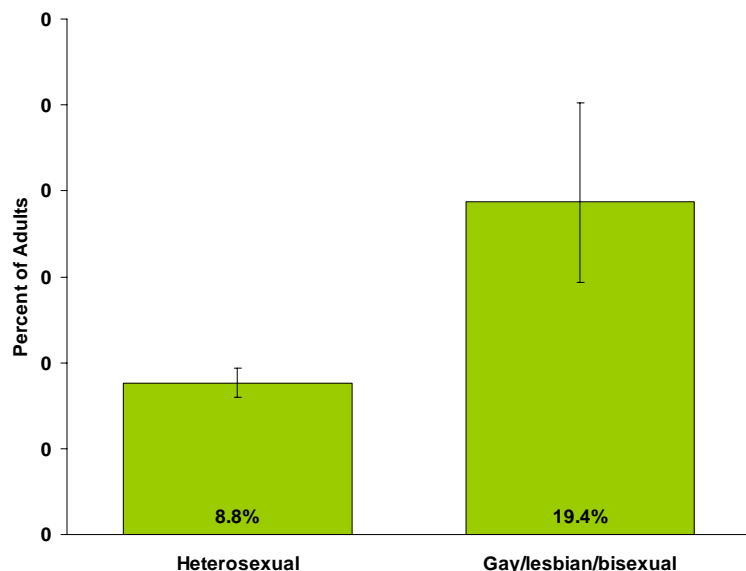
**Frequent Mental Distress by Race/Ethnicity, Age 18 and Older, King County, 2000-2004 Avenge**



Data Source: BRFSS

Produced by: Epidemiology, Planning & Evaluation, Public Health - Seattle & King County

**Frequent Mental Distress by Sexual Orientation, King County, Age 18 and Older, 2000-2004 Average**



Data Source: BRFSS

Produced By: Epidemiology, Planning & Evaluation, Public Health - Seattle & King County

- Those who identified as gay/lesbian/bisexual were over twice as likely as those who identified as heterosexual to experience FMD.

## References

- Centers for Disease Control and Prevention. Self-reported frequent mental distress among adults - United States, 1993-2001. MMWR 2004;53:963-966.

# Suicide

Suicide is among the most serious consequences of mental health problems. In King County, suicide is the leading cause of unintentional injury death, the leading cause of death in 15-to-24-year-olds, and the leading injury-related cause of years of potential life lost before age 65. In this report, suicide hospitalizations are limited to admissions to acute care hospitals. In 2003, the suicide rate was 11.9 per 100,000. This was above the Healthy People 2010 objective of 5.0 per 100,000. See [Public Health Core Indicators for Seattle & King County](#) for more information.

King County ranked third among 15 [major metropolitan counties](#) in suicide deaths.

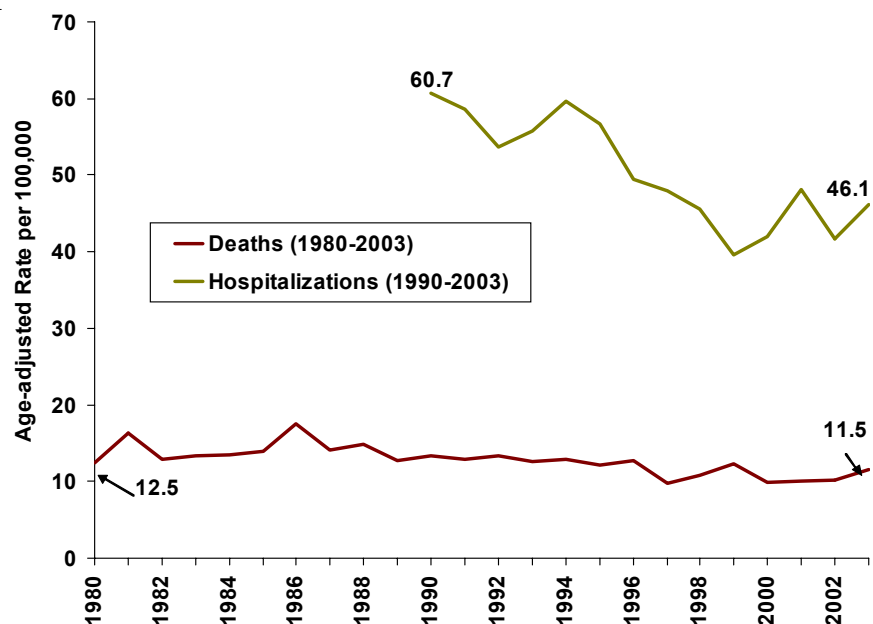
Suicide death rates declined in Seattle since the early 1990s. There are currently no significant differences between regions. Hospitalizations for suicide attempts have declined since the early 1990s.

Suicide attempts are more common among young adults and females, while suicide deaths are greatest in those 65 and older and males. Suicide is more common in whites compared to other race/ethnic groups.

Suicide ideation is relatively common in young people, with almost one in five 10<sup>th</sup> grade students reporting having seriously considered suicide.

- In 2003, 213 King County residents committed suicide, for an age-adjusted rate of 11.9 per 100,000.
- Suicide death rates have fluctuated but, overall, decreased since 1980, from 12.5 per 100,000 to 11.5 per 100,000. However, in the last five years alone, suicide deaths have neither increased nor declined.
- From 1990 to 2003, hospitalization rates for those who attempted suicide declined. However, these data don't include hospitalization admissions to psychiatric hospitals. The decline may be due to the increasing likelihood of referrals from hospital emergency rooms directly to psychiatric hospitals, as well health system changes that were implemented in the 1990s to provide alternatives to psychiatric hospitalization, which can be disruptive to the lives of patients.
- In Seattle, where historically suicide has been highest, suicide deaths declined from 15.3 per 100,000 (1990-1992 average) to 10.1 per 100,000 (2001-2003) (data not shown). Currently, suicide death rates are highest in South County (11.6 per 100,000), although region-level differences are not statistically significant.
- Suicide death rates are highest in whites. Both deaths and hospitalizations tended to be higher in high-poverty neighborhoods (data not shown).
- Since 1990-1992, suicide hospital admission rates fell in Seattle and East (data not shown). For the most current data, (2001-2003), South County residents had the highest rates for suicide hospitalization.

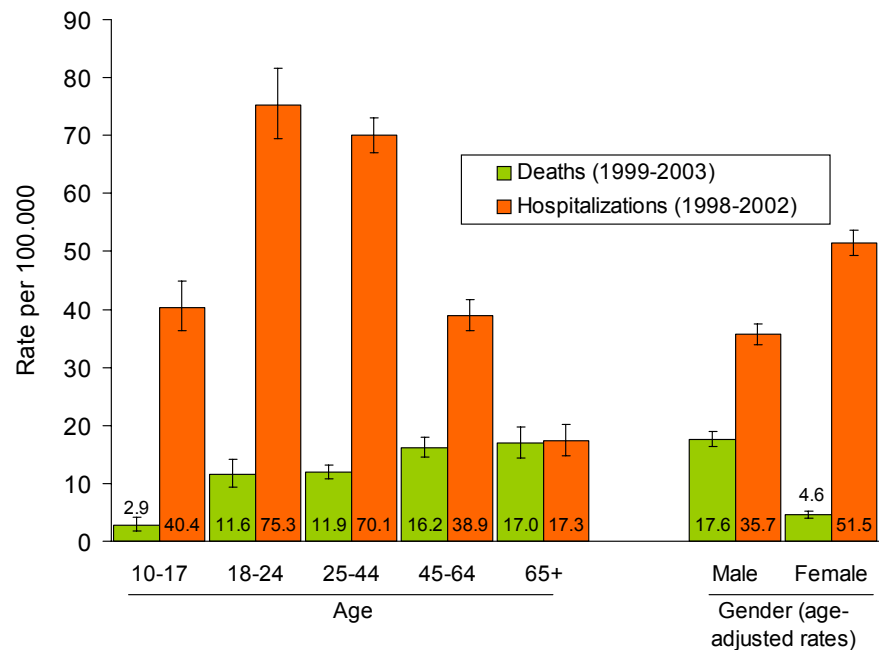
**Suicide Death and Hospitalization Rates, King County, Latest Available Data**



Data Source: Washington State Department of Health, Center for Health Statistics  
Produced by: Epidemiology, Planning & Evaluation, Public Health - Seattle & King County

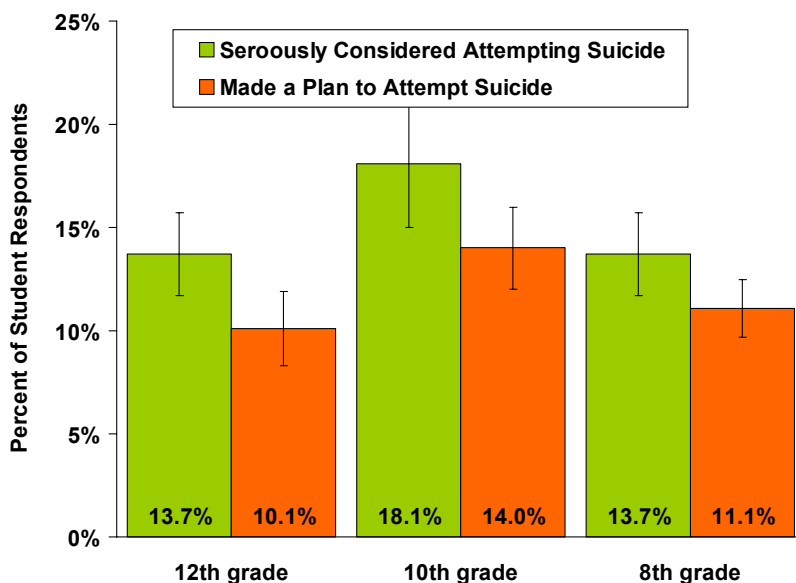
- Hospital admissions for suicide attempts are more common among young adults and females, while suicides deaths are greatest in those 65 and older and males. Hospitalizations for suicide attempts are 13 times more common than deaths in those aged 10 to 17. While suicide hospitalizations were twice as common as deaths in males, hospitalizations were over 10 times more common than deaths in females.
- As age increases, suicide completion rates gradually increase. After age 18 to 24, where they peak, suicide hospitalizations decrease substantially. This is very likely due to greater percentage of "success" in suicide tries in older age groups.

#### Age- and Gender-specific Rates of Suicide Deaths and Hospitalizations, King County, 5-year Average, Most Recent Data Available



Data Source: Washington State Department of Health, Center for Health Statistics  
Produced by: Epidemiology, Planning & Evaluation, Public Health - Seattle & King County

#### Self-reported Suicide Ideation in the Last 12 Months, Grades 8, 10 and 12, King County,\* 2004



\*may not be representative of King County due to low response rates  
Source: Healthy Youth Survey, Washington State Department of Health  
Produced by: Epidemiology, Planning & Evaluation, Public Health - Seattle & King County

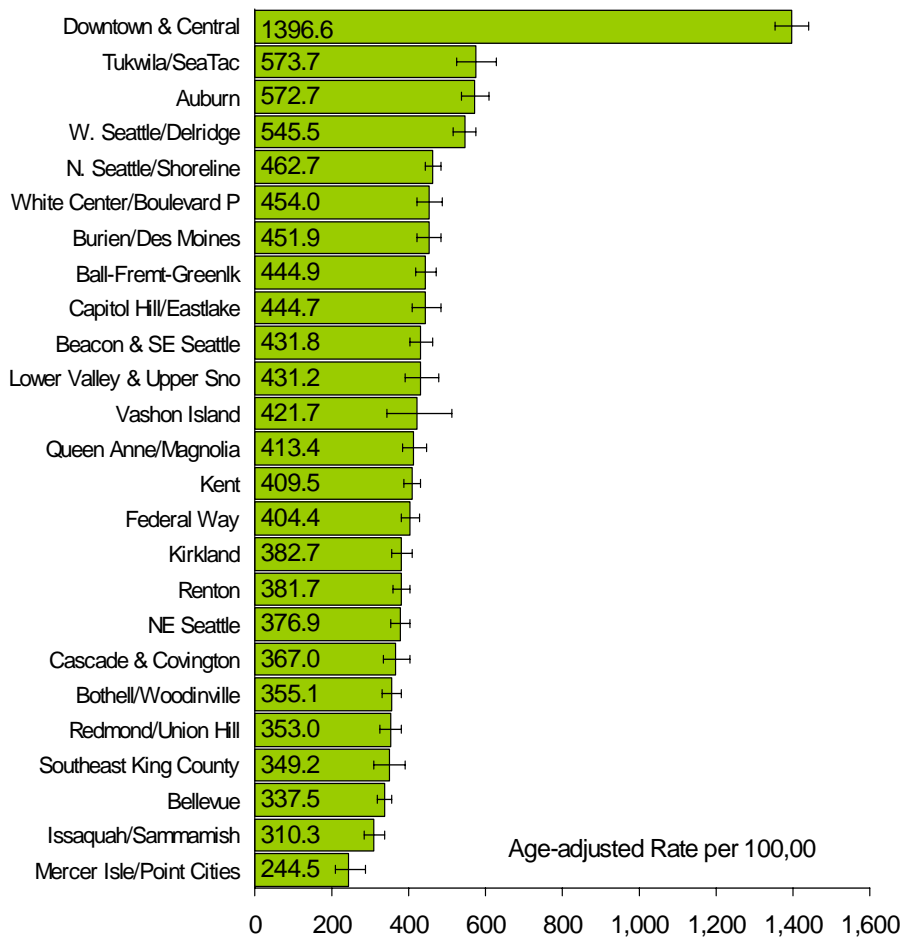
- Suicide ideation and planning is relatively common in young people. In King County, almost one in five (18.1%) 10th grade students who participated in the Healthy Youth Survey reported seriously considering suicide, and 14.0% made a plan for committing suicide in the previous 12 months. Patterns in suicide consideration and plan were similar (while such ideation was less common) in 12th grade and 8th grade students.
- These percentages may not be precisely representative of all King County students because of survey response rates between 47% and 67%. However, in a theoretical survey in which everyone participated, there would have to be markedly different answers from those who were non-respondents in the HYS to change the general pattern seen here.

# Other Mental Health-Related Hospitalizations:

## All Psychoses and Depression

Data on mental health other than suicide deaths is sparse. Information is not systematically collected or made available on those admitted to standalone mental hospitals or other treatment facilities, or for outpatient treatment of mental health problems. Hospitalizations in acute care facilities for mental health problems, despite limitations mentioned in the section on suicide, probably provide some sense of where the burden of severe mental health problems falls in King County.

**All Psychoses Hospitalization Rates by Health Planning Area, King County, 3-year Average, 2001 to 2003**



Data Source: Washington State Department of Health, Center for Health Statistics  
Produced by: Epidemiology, Planning & Evaluation, Public Health - Seattle & King County

- The hospitalization rate for all psychoses increased between 1987 (388 per 100,000) (the first year of hospitalization data collection) and 2000 (481 per 100,000). After peaking in 2000, the rate fell between 2000 and 2003 (438 per 100,000).
- Hospitalizations were over twice as high in the Downtown/Central Seattle Health Planning Area (HPA) (1397 per 100,000) than in any other HPA, probably reflecting the larger population of homeless people in this neighborhood. In other HPAs, rates in southeast and west Seattle and South County were generally higher than those in North County and East County.
- Rates for hospitalization for depression followed a similar pattern, with the highest rates shown in Downtown/Central Seattle (403 per 100,000) and lowest in the relatively affluent Mercer Island/Pt. Cities (104 per 100,000) (data not shown).



# Alcohol-Induced Deaths

About two-thirds of the alcohol-induced deaths were due to alcoholic liver diseases such as cirrhosis of the liver. In 2003, there were 159 alcohol-induced deaths among King County residents. The death rate in males was 2.6 times the rate in females. See [Public Health Core Indicators for Seattle & King County](#) for more information.

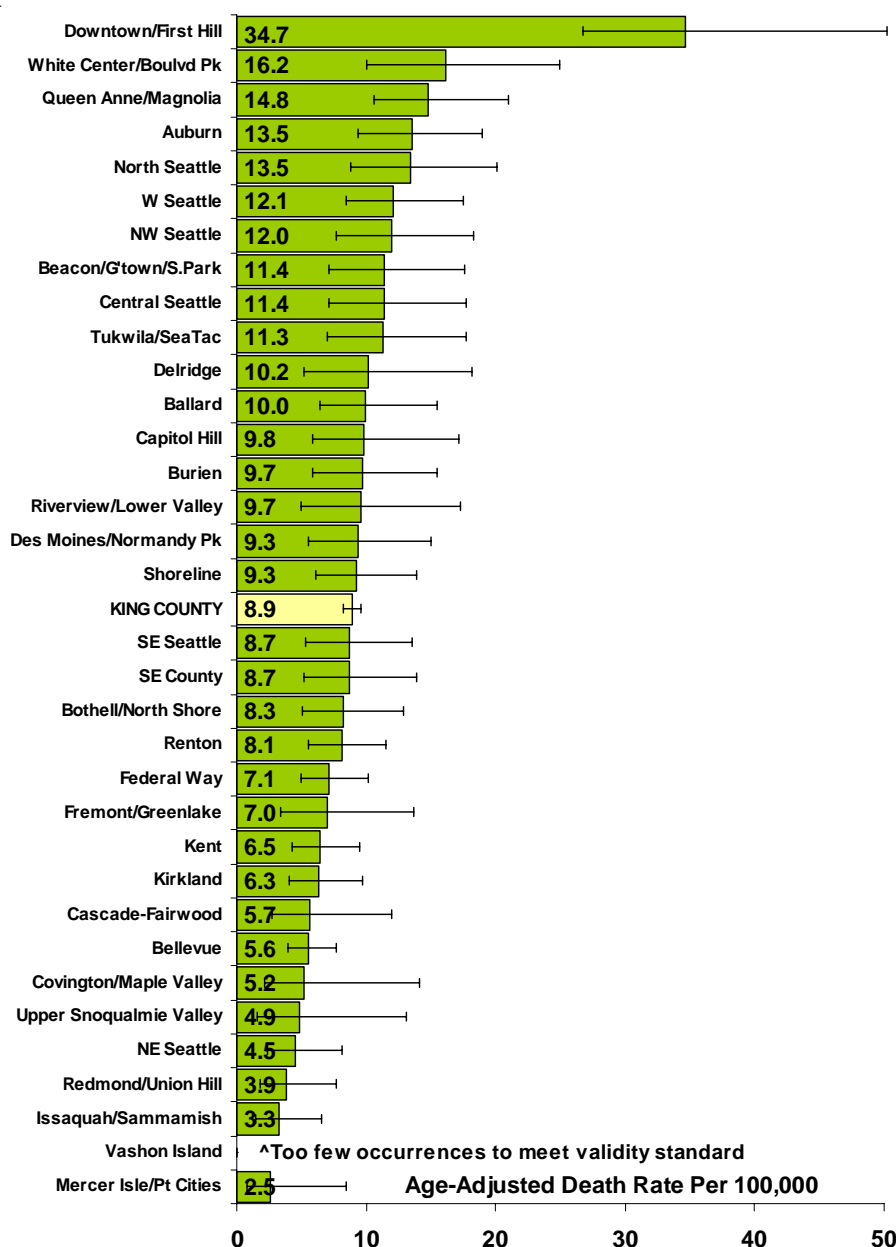
## King County and Regions

- There was no significant change in alcohol induced deaths between 1994 and 2003. (data not shown)

## Pattern by Health Planning Area

- The death rate in Downtown/First Hill residents was 3.9 times the county rate. The rates in White Center/Boulevard Park and Queen Anne/Magnolia residents were also significantly higher than the county rate. The rates in Mercer Island/Point Cities, Issaquah/Sammamish, Redmond/Union Hill, and Northeast Seattle were significantly lower than the county rate.

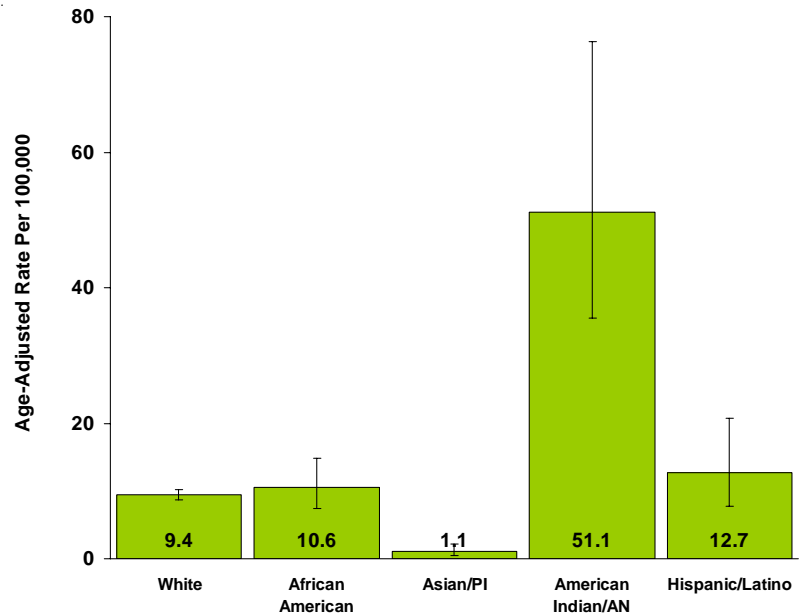
Alcohol-Induced Death Rate in King County by Health Planning Area, 1999-2003 Averages



## Focus on Disparities

- American Indians/Alaska Natives were particularly affected by alcohol-induced deaths. The death rate for American Indian/Alaska Natives was five times the rate for white. The death rate for Asian/Pacific Islanders was significantly lower than the rates for the other racial/ethnic groups.

**Alcohol-Induced Death Rate in King County  
by Race/Ethnicity, Five-Year Averages, 1999-2003**



Source: Washington State Department of Health, Center for Health Statistics, Death Certificates  
Produced by: Public Health - Seattle & King County, Epidemiology, Planning, and Evaluation, 12/0

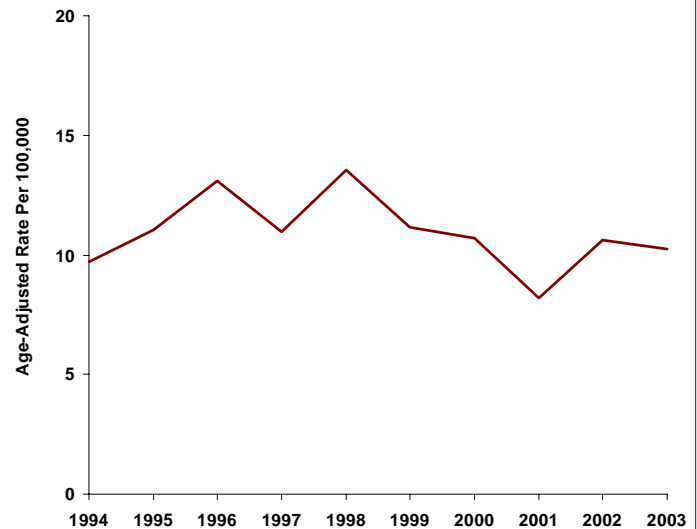
# Drug-Induced Deaths

Averaged over 2001-2003, 70.3% of the drug-induced deaths among King County residents were accidental, 12.2% were suicides, 5.9% were a result of mental and behavioral disorders, and 11.6% had undetermined intent.

## King County and Regions

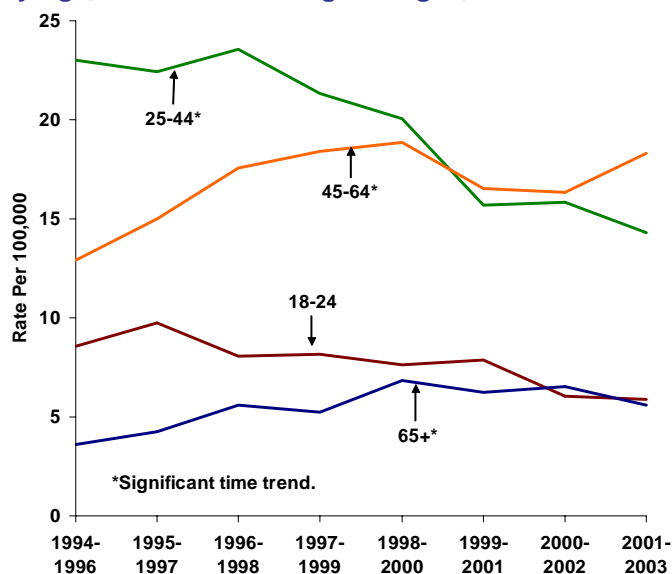
- Drug-induced deaths peaked in 1998, and have declined slightly since then but remained elevated compared to earlier years.

Drug-Induced Death Rate in King County, 1994-2003



Data Source: Washington State Department of Health, Center for Health Statistics, Death Certificates  
Produced by: Public Health - Seattle & King County, Epidemiology, Planning, and Evaluation

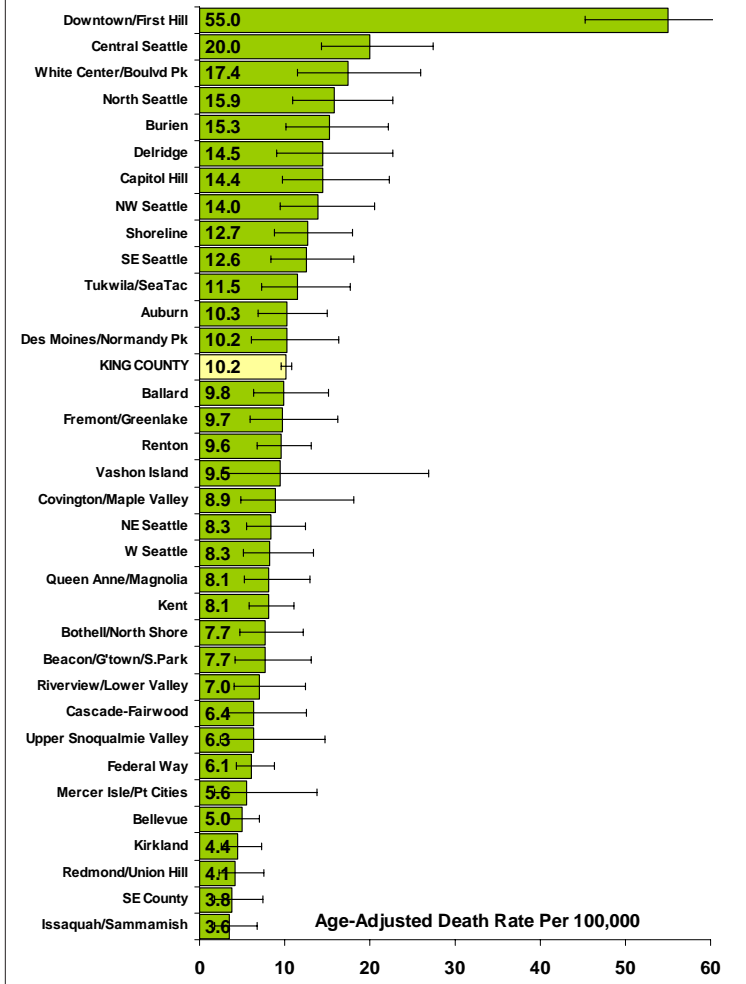
Drug-Induced Death Rate in King County by Age, Three-Year Rolling Averages, 1994-2003



Data Source: Washington State Department of Health, Center for Health Statistics, Death Certificates  
Produced by: Public Health - Seattle & King County, Epidemiology, Planning, and Evaluation

- This pattern is seen mainly in the 45-64 year old and the 65 and older age groups. In contrast, the rate in those aged 25-44 steadily declined between 1994 and 2003.
- Among the four regions, Seattle experienced the largest increase to 1998 and, since 1998, had a significant decline in the death rate while there was no significant change in the other regions (data not shown).

### Drug-Induced Death Rate in King County by Health Planning Area, 1999-2003 Averages



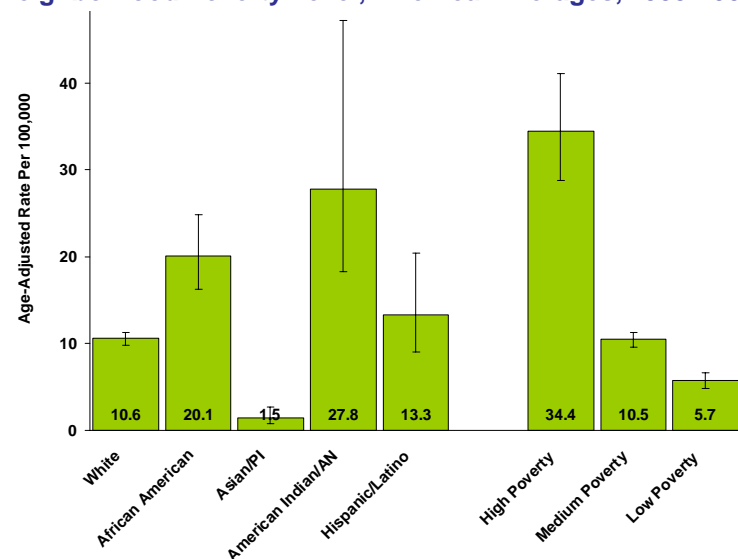
### Patterns by Health Planning Area

- The death rate in Downtown/First Hill was 5.4 times the county average.
- Central Seattle, White Center/Boulevard Park, and North Seattle also had a significantly higher than average death rate.
- The death rates in eastside areas and Federal Way were significantly lower than the county rate.

### Focus on Disparities

- The death rates among African Americans and American Indian/Alaska Natives were significantly higher than the white rate while the rate among Asian/Pacific Islanders was significantly lower.
- The death rate in high poverty neighborhoods were also significantly higher than lower poverty neighborhoods.

### Drug-Induced Death Rate in King County by Race/Ethnicity, Neighborhood Poverty Level, Five-Year Averages, 1999-2003



Source: Washington State Department of Health, Center for Health Statistics, Death Certificates  
Produced by: Public Health - Seattle & King County, Epidemiology, Planning, and Evaluation

## Medical Examiner's Data on Type of Drugs<sup>1</sup> (data not shown)

On the death certificate, drug types are often not specifically recorded. Data tracked by the King County Medical Examiner's office include more detailed information on the type of drugs for overdose deaths occurred in King County<sup>2</sup>. The majority of deaths involved multiple drugs with an average of approximately two drugs per case.

Heroin was the most common drug involved in overdose deaths, present in 759 of 1587 deaths (48%) from 1997-2004. Heroin had a marked spike in 1998 with 144 deaths. Numbers declined to less than 100 per year from 2001 to 2004.

Cocaine and alcohol were the second most common drugs detected, with each involved in 36% of deaths from 1997-2004. Alcohol numbers were at their highest level in 1998, primarily due to their use in combination with heroin. Otherwise, no trends are discernable for cocaine or alcohol from 1997 to 2004.

Prescription-type opiates, also known as narcotic analgesics, were involved in 118 deaths in 2004, making it the most common drug detected that year. Between 1997 and 2004, overdose deaths in which prescription-type opiates were one of the drugs present increased four-fold. These deaths include both legal usage for pain or addiction treatment and intentional misuse via forged prescriptions or street purchases. From 1997 to 2003, the volume of prescription opiates sold in the King County area increased 68%.

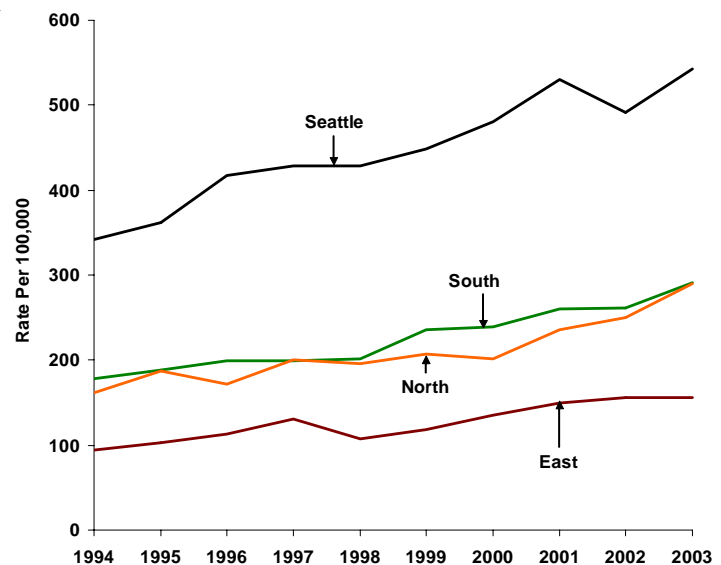
Prescription and over the counter depressant (such as Valium®, secobarbital, and Benadryl®) involved deaths also increased in recent years. They are almost always used in combination with other drugs such as alcohol, heroin, and prescription-type opiates.

Methamphetamine involved deaths increased from 3 deaths in 1997 to 18 deaths in 2003 and 2004.

## Illicit Drug-Related Hospitalizations

- In 2003, there were 6,481 illicit drug-related hospitalizations that accounted for 5.4% of the non-childbirth hospitalizations among King County residents. The hospitalization rate increased significantly between 1994-2003 and between 1999 and 2003 in both males and females, in all adult age groups, in high, medium, and low poverty neighborhoods, and in all four regions (only region data is shown).

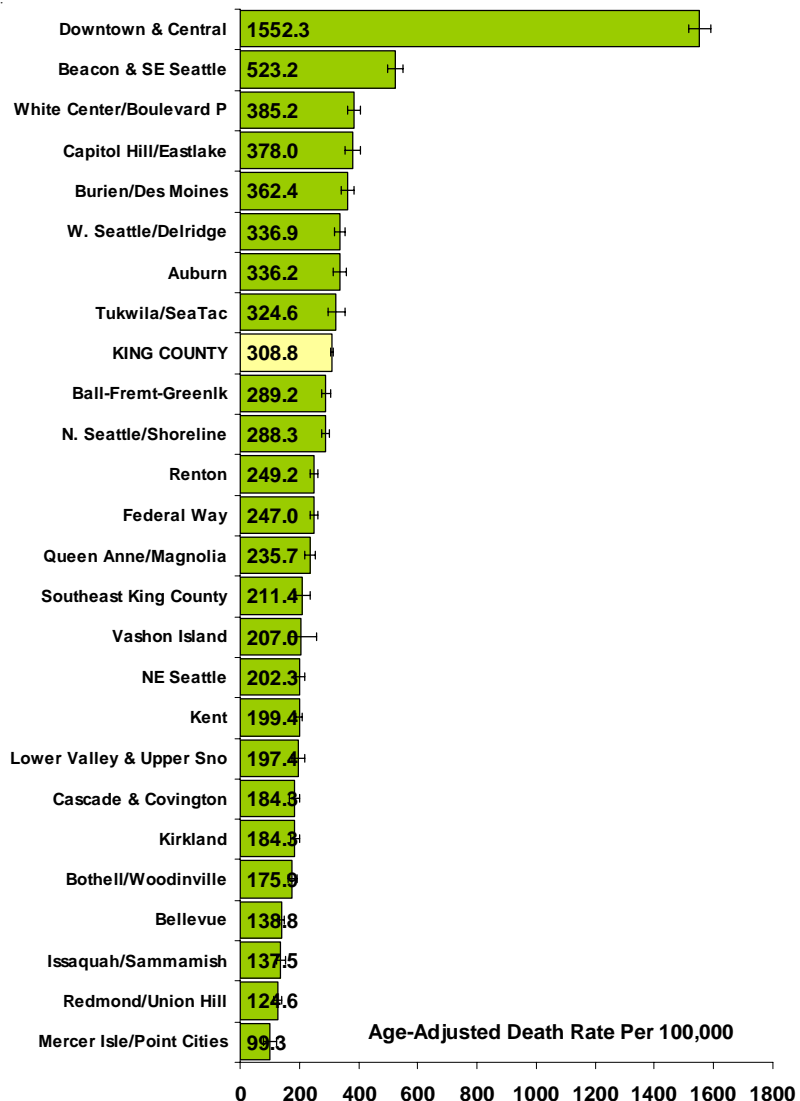
**Illicit Drug-Related Hospitalization Rate in King County by Region, 1995-2004**



Data Source: Washington State Department of Health, Center for Health Statistics, CHARS  
Produced by: Public Health - Seattle & King County, Epidemiology, Planning, and Evaluation

- Seattle had significantly higher hospitalization rate than the other regions. Among the Health Planning Areas, the hospitalization rate in Downtown/Central Seattle was five times the county average rate. Beacon Hill/Southeast Seattle, White Center/Boulevard Park, Capitol Hill/Eastlake, and Auburn had higher than average rate.
- Hospitalization data reported here are limited to hospital admissions of King County residents to Washington State acute care hospitals. Information on substance-abuse-related outpatient visits to any facility and admissions to standalone hospitals or treatment centers are not systematically gathered or reported and are not represented in this section.

### Illicit Drug-Related Hospitalization Rate in King County by Health Planning Area, 2000-2004 Averages



#### References

- <sup>1</sup> This section was adapted from material graciously provided by Caleb Banta-Green of the University of Washington Alcohol and Drug Abuse Institute.
- <sup>2</sup> The Medical Examiner's data are based on place of occurrence, not place of residence. Deaths of King County residents outside the county are not included while deaths of non-King County residents within the county are included. For more detailed data on drug abuse trends, see <http://www.metrokc.gov/health/subabuse/>. For more detailed Medical Examiner's data, please read its 2004 Annual Report at: <http://www.metrokc.gov/health/examiner/2004report/index.htm>